Docket No.: 2712P009



### THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

ALEXANDER O. GOUSHCHA, ET AL.

Application No.: 10/606,053

Filed: June 25, 2003

For: ULTRA THIN BACK-ILLUMINATED

PHOTODIODE ARRAY STRUCTURES

AND FABRICATION METHODS

Art Group: 2812

Examiner:

### INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure, enclosed is a copy of Information Disclosure Statement by Applicant (form PTO/SB/08), which is being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s). Copies of the references cited on PTO/SB/08 are enclosed herewith.

-1- 2712P009

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Respectfully submitted,

Blakely, Sokoloff, Taylor & Zafman LLP

Date: November 05, 2003

3200 Park Center Drive, Suite 750

Costa Mesa, CA 92626 Telephone: (714) 557-3800

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Jessica A. Clark

Date

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#### Application No. 10/606,053 & THAUL TRANSMITTAL FORM June 25, 2003 Filing Date (to be used for all correspondence after initial filing) Alexander O. Goushcha First Named Inventor Art Unit 2812 **Examiner Name** Total Number of Pages in This Submission 118 2712P009 Attorney Docket Number **ENCLOSURES** (check all that apply) After Allowance Communication Fee Transmittal Form Drawing(s) Appeal Communication to Board of Appeals and Interferences Fee Attached Licensing-related Papers Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Petition Amendment / Response After Final Petition to Convert a Provisional Application **Proprietary Information** Affidavits/declaration(s) Power of Attorney, Revocation Change of Correspondence Address **Status Letter** Extension of Time Request Other Enclosure(s) **Terminal Disclaimer** (please identify below): **Express Abandonment Request** Request for Refund Copies of 13 Cited Information Disclosure Statement References PTO/SB/08 CD, Number of CD(s) Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Remarks **Basic Filing Fee** Declaration/POA Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Roger W. Blakely, Jr., Reg. No. 25,831 or Individual name BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Signature November 5, 2003 Date CERTIFICATE OF MAILING/TRANSMISSION I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Typed or printed name Jessica A. Clark

November 5, 2003

Date

Signature



## for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$)

Application Number 10/606,053
Filing Date June 25, 2003
First Named Inventor Alexander O. Goushcha

Examiner Name
Group/Art Unit 2812
Attorney Docket No. 2712P009

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)							
☐ Check ☐ Credit card ☐ Money ☐ Other ☒ None	3. ADDITIONAL FEES							
Deposit Account	Large	Entity	Sma	II Entity	•			
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Name  The Commissioner is authorized to: ( check all that apply)	2053 1812	130 2,520	2053 1812	130 2,520	Non-English specificat For filing a request for		ation .	
Charge fee(s) indicated below Credit any overpayments	1804	920 *	1804	920 *	, ,	n of SIR prior to		
Charge any additional fee(s) required under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.		4.040		4 0 40 *	Examiner action	( C)D - (		
Charge fee(s) indicated below, except for the filing fee	1805	1,840 *	1805	1,840	<ul> <li>Requesting publication Examiner action</li> </ul>	or SIR after		
to the above-identified deposit account	1251	110	2251	55	Extension for reply with	nin first month		
FEE CALCULATION	1252	420	2252	210	Extension for reply with	nin second month		
1. BASIC FILING FEE	1253	950	2253	475	Extension for reply with	nin third month		
Large Entity Small Entity	1254	1,480	2254	740	Extension for reply with	nin fourth month		
Fee Fee Fee Fee <u>Fee Description</u> Fee Paid Code (\$) Code (\$)	1255	1,210	2255	605	Extension for reply with	nin fifth month		
1001 770 2001 385 Utility filing fee	1404	330	2401	165	Notice of Appeal			
1002 340 2002 170 Design filing fee	1402	330	2402	165	Filing a brief in suppor			
1003 530 2003 265 Plant filing fee	1403	290	2403	145	Request for oral hearing		ina	
1004 770 2004 385 Reissue filing fee	1451	1,510	2451	1,510 55	Petition to institute a p		uig	····
1005 160 2005 80 Provisional filing fee	1452 1453	1,330	2452 2453	665				
SUBTOTAL (1) (\$)	1501	1,330	2501	665				
2. EXTRA CLAIM FEES Extra Fee from	1502	480	2502	240	Design issue fee	,		
. Claims below Fee Paid	1503	640	2503	320	Plant issue fee			
Total Claims = X	1460	130	2460	130	Petitions to the Comm	issioner		
Independent State	1807	50	1807	50	Processing fee under 3	7 CFR 1.17(q)		
Multiple Dependent =	1806	180	1806	180	Submission of Informa	ition Disclosure Str	mt	
Large Entity Small Entity	8021	40	8021	40	Recording each paten property (times number	•		
Fee Fee Fee <u>Fee Description</u> Code (\$) Code (\$)	1809	770	1809	385	Filing a submission after (37 CFR § 1.129(a))			
1202 18 2202 9 Claims in excess of 20	1810	770	2810	385	For each additional inv	ention to be		
1201 86 2201 43 Independent claims in excess of 3  1203 290 2203 145 Multiple Dependent claim, if not paid		,,,		500	examined (37 CFR § 1			
1203 290 2203 145 Multiple Dependent claim, if not paid 1204 86 2204 43 **Reissue independent claims over original	1801	770	2801	385	Request for Continued	Examination (RCE	Ξ)	
patent	1802	900	1802	900	Request for expedited of a design application			
1205 18 2205 9 **Reissue claims in excess of 20 and over original patent	Other fe	e (specify)					***************************************	
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SUBMITTED BY	R	egistratic	on No.				lete (if applica	
Name (Print/Турв) Roger W. Blakely, Jr.		tomey/Age		2	25,831	Telephone	(714) 557	
Signature Rown Black						Date .	11/05	5/03



### **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

**Application Number** 10/606,053 Filing Date June 25, 2003 First Named Inventor Alexander O. Goushcha Art Unit 2812 **Examiner Name** of 2 Attorney Docket Number Sheet 1 2712P009

Complete if Known

	NON PATENT LITERATURE DOCUMENTS					
Examiner Cite Initials* No.1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
		DERENZO, STEPHEN E., "Initial Characterization of a BGO-Photodiode Detector for High Resolution Positron Emission Tomography", February 1984, IEEE Transactions on Nuclear Science, Vol. NS-31, No. 1, Pgs 620-626				
6		TAKAHASHI, TETSUHIKO et al., "Design of Integrated Radiation Detectors with a-Si Photodiodes on Ceramic Scintillators for use in X-Ray Computed Tomography", June 1990, IEEE Transactions on Nuclear Science, Vol. 37, No. 3, Pgs 1478-1482				
		BURNS, H. N. "BUCK" et al., "Compact, 625-channel scannerless imaging laser radar receiver", 1996, Proc. SPIE, Vol. 2748, Pgs 39-46				
		IWANCZYK, J.S. et al., "Simulation and modelling of a new silicon X-ray drift detector design for synchrotron radiation applications", 1996, Nuclear Instruments and Methods in Physics Research, Section A, Vol. 380, Pgs 288-294				
		KWA, TOMMY A. et al., "Backside-Illuminated Silicon Photodiode Array for an Integrated Spectrometer", May 1997, IEEE Transactions on Electron Devices, Vol. 44, No. 5, Pgs 761-765				
		HOLLAND, S.E. et al., "Development of Low Noise, Back-Side Illuminated Silicon Photodiode Arrays", June 1997, IEEE Transactions on Nuclear Science, Vol. 44, No. 3, Pgs 443-447				
		PATT, B.E. et al., "High Resolution CsI(T1)/Si-PIN Detector Development for Breast Imaging", August 1998, IEEE Transactions on Nuclear Science, Vol. 45, No. 4, Pgs 2126-2131				

Examiner	Date
Signature	Considered

<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

<sup>&#</sup>x27;Applicant's unique citation designation number. 'Applicant is to place a check mark here if English language Translation is attached.



Sheet

# Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of

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Application Number 10/606,053
Filing Date June 25, 2003
First Named Inventor Alexander O. Goushcha
Art Unit 2812
Examiner Name
Attorney Docket Number 2712P009

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
		VISHAY SEMICONDUCTORS S268P Data Sheet, "Silicon PIN Photodiode Array", May 20, 1999, Document No. 81538, Pgs 1-5	
		DETECTION TECHNOLOGY, INC., "New Photodiode Array Products for Computer Tomography-Detectors", News Bulletin for the Customers and Cooperation Partners, Winter 2000-2001	
		PATT, B.E. et al., "Fast-Timing Silicon Photodetectors", June 2000, IEEE Transactions on Nuclear Science, Vol. 47, No. 3, Pgs 957-964	
		HAMAMATSU PHOTONICS K.K., SOLID STATE DIVISION, "Si Photodiode Catalog", February 2002, Pgs 1-25	
		TORNAI, MARTIN P. et al., "A novel silicon array designed for intraoperative charged particle imaging", November 2002, Medical Physics, Vol. 29, No. 11, Pgs 2529-2540	
		LUHTA, RANDY et al., "Back Illuminated Photodiodes for Multislice CT", February 15-20, 2003, San Diego, California USA	

Examiner	Date		
Signature	Considered		

<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

<sup>&#</sup>x27;Applicant's unique citation designation number. 'Applicant is to place a check mark here if English language Translation is attached.